UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,390	04/30/2001	John M. Baron	10006918-1	2736

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EXAMINER
HANNETT, JAMES M

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 September 2005</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-20</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>03 December 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/2/2005

has been entered.

Response to Arguments

Applicant's arguments filed 12/3/2004 have been fully considered but they are not

persuasive. The applicant has amended the claims to include new limitations not

addressed in the prior office action. The applicant argues that the prior art does not teach

these new limitations. The examiner has addressed these new limitations in the following

grounds of rejection. In regards to the applicants arguments that the prior art does not

meet the new limitations as includes in the independent claims. The examiner asserts that

Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-18 and depicts in

Figure 1 a method for handling image data within a digital camera (114) having a

memory storage unit (350 and 354) for storing image data, each image data element

having an archival status; and indicating said archival status of the image data element.

Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity for the camera

to add additional image data elements to the image storage. Pavley teaches that when an

image is captured, the camera determines if there is sufficient memory space to store the

image. Pavley teaches that if more space is needed, the new image will be stored by

deleting images from memory which have been backed up elsewhere. The camera of

Pavley determines which images have been backed up by checking the archival status of

the images. Therefore, Pavley teaches determining the capacity for the camera to add

additional image data elements to the image storage as a function of the archival status.

However, Pavley does not teach that the images are stored in an image storage queue in

chronological order and deleting images based on the time at which the images where

captured. To meet this limitation the examiner relied upon Anderson et al to teach on

Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save

images in a digital camera using an image queue (78) so that the images can be read in

and out on a first in first out basis. This is advantageous because it allows the image

stored in the camera for the longest period of time to be erased first. Therefore, since the

images are stored on a FIFO basis, the images are viewed by the examiner to be saved in

chronological order based on the time of image capture.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

1:   Claims 1, 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

USPN 6,445,460 Pavley in view of USPN 6,177,956 Anderson et al.

2:       As for Claim 1, Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-

18 and depicts in Figure 1 a method for handling image data within a digital camera (114)

having a memory storage unit (350 and 354) for storing image data, the camera

connectable to an external information handling system (110) adapted to receive image

data from the camera, the method comprising: storing image data elements, each image

data element having an archival status; and indicating said archival status of the image

data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity

for the camera to add additional image data elements to the image storage. Pavley teaches

that when an image is captured, the camera determines if there is sufficient memory

space to store the image. Pavley teaches that if more space is needed, the new image will

be stored by deleting images from memory which have been backed up elsewhere. The

camera of Pavley determines which images have been backed up by checking the

archival status of the images. Therefore, Pavley teaches determining the capacity for the

camera to add additional image data elements to the image storage as a function of the

archival status. However, Pavley does not teach that the images are stored in an image

storage queue in chronological order and deleting images based on the time at which the

images where captured.

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61

That it is advantageous to save images in a digital camera using an image queue (78) so

that the images can be read in and out on a first in first out basis. This is advantageous

because it allows the image stored in the camera for the longest period of time to be

erased first. Therefore, since the images are stored on a FIFO basis, the images are

viewed by the examiner to be saved in chronological order based on the time of image

capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the images captured by the camera of Pavley consecutively in an image storage queue in order to allow the image stored in the camera for the longest period of time to be erased first.

3:      As for Claim 3, Pavley further teaches on Column 5, Lines 39-45 each image data element has a filename, and wherein the indicating comprises naming the filename to indicate the archival status. A file attribute designation is viewed by the examiner as a file name. The system of Pavley in view of Anderson is viewed by the examiner as a directory system.

4:      In regards to Claim 4, Pavley teaches on Column 4, Lines 44-60 and Column 5, Lines 39-45 and depicts in Figure 4 forming a region in memory that stores the image data (810) and other information such as header information (805) and file attributer designators (825), This is viewed as creating an organizational structure comprising a reserved location for archived image data elements (810); Pavley teaches that a file attribute designator can be set to indicate that the stored image data has been archived. Therefore, the archived image data is places in the image data area (810) of the image file. Image data area (810) is viewed as the reserved location. The system of Pavley in view of Anderson is viewed by the examiner as a directory system.

5:      As for Claim 5, Pavley further teaches on Column 6, Lines 10-17 archiving one image data element, the archiving comprising copying the image data element to the external information handling system (computer system); and changing the archival status of the image data element to indicate that the data element is archived.

6:      In regards to Claim 6, Pavley further teaches on Column 4, Lines 44-47 and

depicts in Figure 4 associating each image data element with a header (805) and image

tags (825) which indicate that the image has been archived. Official notice is taken that it

was well know in the art at the time the invention was made to restructure data packet

information and to change the location of different data within the packets.

        Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to combine the header section (805) and the image tags

section (825) of the data in Pavley. So that the image tag data was contained in the header

information.

7:      As for Claim 7, Pavley further teaches on Column 5, Lines 43-45 a data bit

indicating archival status, wherein the changing the contents of the header comprises

inverting the data bit.

8:      In regards to Claim 8, It is inherent that the image files have filenames that

comprise at least one character. Furthermore, Pavley further teaches on Column 5, Lines

43-45 the use of a data bit for indicating archival status. The changing of the data bits to

indicate archival status is viewed by the examiner to be changing a character. The system

of Pavley in view of Anderson is viewed by the examiner as a directory system.

9:      As for Claim 9, Pavley further teaches on Column 6, Lines 10-17 receiving a

selection from the camera (110) of one image data element (image file) to the computer

(1100) for archiving.

10:     In regards to Claim 10, Pavley further teaches on Column 6, Lines 10-17 the

archiving comprises: connecting the camera (110) to the external information handling

system (computer system); and copying the image data element from the memory storage

unit in the camera to the external information handling system.

11:     As for Claim 11, Pavley teaches on Column 6, lines 1-18 and Column 2, Lines

34-47 the archiving comprises: copying the image data element from the memory in the

camera (110) to the external information handling system (1100). Pavley teaches that the

computer has an optional removable memory port (352) to receive a removable memory

card (354). Pavley does not specifically teach that the memory in the camera comprises

removable memory.

Official notice is taken that it was well known in the art at the time the invention

was made to equip digital cameras with removable memory cards so that the memory

capacity of the camera could be substantially increased.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to equip the camera or Pavley with removable memory

cards so that the memory capacity of the camera could be substantially increased and to

remove the memory cards and connect the removable storage medium to the computer

via the memory card interface (352).

12:     In regards to Claim 12, Pavley further teaches on Column 5, Lines 63-67 and

Column 6, Lines 1-7 determining that the memory storage unit is full; determining that at

least one image data element in the image storage queue has been archived; and deleting

from the memory storage unit at least one archived image data element. Furthermore,

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is

advantageous to save images in a digital camera using an image queue (78) so that the

images can be read in and out on a first in first out basis. Therefore, since the images are

stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

13:     As for Claim 13, Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 that the images are stored in a queue in which the oldest or last image is deleted (FIFO)

14:     In regards to Claim 14, Pavley further teaches on Column 5, Lines 63-67 and Column 6, Lines 1-7 determining that the memory storage unit is full and determining if none of the image data elements in the image storage queue have been archived. Pavley teaches that if no images have been archived more storage space is needed. However, Pavley does not teach the method of notifying a user that the memory storage unit is full.

Official notice is taken that it was well know in the art at the time the invention was made to notify users when a memory is full so that a user can take appropriate action and change a memory card if desired.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to notify to user of the camera of Pavley when the memory is full so that a user can take appropriate action and change a memory card if desired.

15:     As for Claim 15, Pavley further teaches on Column 6, Lines 3-9 receiving a selection of an image data element for deletion; and deleting the selected image data element from the memory storage unit. Pavley teaches that the memory management system selects an image file that had been archived and deletes the file since the archived status indicates that the file has been backed up by copying the image data to the personal computer.

16:     In regards to Claim 16, Pavley teaches on Column 5, Lines 61-67 and Column 6,

Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital

camera (114) having a memory storage unit (350 and 354) for storing image data, the

camera connectable to an external information handling system (110) adapted to receive

image data from the camera, the method comprising: storing image data elements, each

image data element having an archival status; and indicating said archival status of the

image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining

capacity for the camera to add additional image data elements to the image storage.

Pavley teaches that when an image is captured, the camera determines if there is

sufficient memory space to store the image. Pavley teaches that if more space is needed,

the new image will be stored by deleting images from memory which have been backed

up elsewhere. The camera of Pavley determines which images have been backed up by

checking the archival status of the images. Therefore, Pavley teaches determining the

capacity for the camera to add additional image data elements to the image storage as a

function of the archival status. However, Pavley does not teach that the images are stored

in an image storage queue in chronological order and deleting images based on the time

at which the images where captured.

        Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61

That it is advantageous to save images in a digital camera using an image queue (78) so

that the images can be read in and out on a first in first out basis. This is advantageous

because it allows the image stored in the camera for the longest period of time to be

erased first. Therefore, since the images are stored on a FIFO basis, the images are

viewed by the examiner to be saved in chronological order based on the time of image

capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to store the images captured by the camera of Pavley

consecutively in an image storage queue in order to allow the image stored in the camera

for the longest period of time to be erased first.

17:     As for Claim 17, Pavley does not specifically teach that the memory in the camera

comprises removable memory.

Official notice is taken that it was well known in the art at the time the invention

was made to equip digital cameras with removable memory cards so that the memory

capacity of the camera could be substantially increased.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to equip the camera or Pavley with removable memory

cards so that the memory capacity of the camera could be substantially increased.

18:     In regards to Claim 18, Pavley teaches on Column 5, Lines 61-67 and Column 6,

Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital

camera (114) having a memory storage unit (350 and 354) for storing image data, the

camera connectable to an external information handling system (110) adapted to receive

image data from the camera, the method comprising: storing image data elements, each

image data element having an archival status; and indicating said archival status of the

image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining

capacity for the camera to add additional image data elements to the image storage.

Pavley teaches that when an image is captured, the camera determines if there is

sufficient memory space to store the image. Pavley teaches that if more space is needed, the new image will be stored by deleting images from memory which have been backed up elsewhere. The camera of Pavley determines which images have been backed up by checking the archival status of the images. Therefore, Pavley teaches determining the capacity for the camera to add additional image data elements to the image storage as a function of the archival status. However, Pavley does not teach that the images are stored in an image storage queue in chronological order and deleting images based on the time at which the images where captured.

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. This is advantageous because it allows the image stored in the camera for the longest period of time to be erased first. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the images captured by the camera of Pavley consecutively in an image storage queue in order to allow the image stored in the camera for the longest period of time to be erased first.

19:     As for Claim 19, Pavley further teaches on Column 6, Lines 10-17 instructions for archiving one image data element, the archiving comprising copying the image data element to the external information handling system (1100); and instructions for

changing the archival status of the image data element to indicate that the data element is

archived.

20:    In regards to Claim 20, Pavley further teaches on Column 5, Lines 63-67 and

Column 6, Lines 1-7 instructions for determining that the memory storage unit is full;

instructions for determining that at least one image data element in the image storage

queue has been archived; and instructions for deleting from the memory storage unit at

least one archived image data element. Furthermore, Anderson et al teaches on Column 6,

Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a

digital camera using an image queue (78) so that the images can be read in and out on a

first in first out basis. Therefore, since the images are stored on a FIFO basis, the images

are viewed by the examiner to be saved in chronological order based on the time of image

capture.

21:   Claims 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN

6,445,460 Pavley in view of USPN 6,177,956 Anderson et al in further view of USPN

6,335,742 Takemoto.

22:    In regards to Claim 2, Pavley further teaches on Column 4, Lines 44-47 and

depicts in Figure 4 associating each image data element with a header (805) and image

tags (825) which indicate that the image has been archived. Official notice is taken that it

was well know in the art at the time the invention was made to restructure data packet

information and to change the location of different data within the packets.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to combine the header section (805) and the image tags

section (825) of the data in Pavley. So that the image tag data was contained in the header information.

Furthermore, Pavley in view of Anderson does not teach the use of including in the header information related to time and date of image capture.

Takemoto depicts in Figure 3 and teaches on Column 6, lines 34-45 that it is advantageous when designing an image file management system to include information related to image capture time and date captured in the header of the image file in order to allow the user of the image file system to easily remember when an image was captured.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include information related to date and time of image capture as taught by Takemoto in the image header of Pavley in view of Anderson in order to allow a user to easily determine the time and date of image capture.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
September 27, 2005

NGOC-YEN VU
PRIMARY EXAMINER